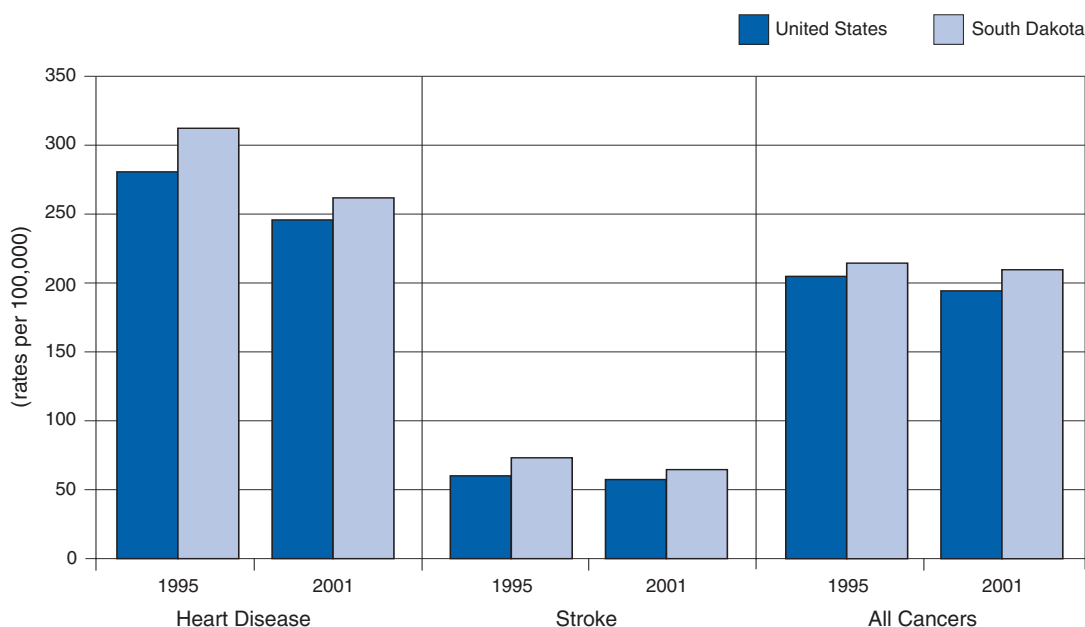


Chronic Diseases: The Leading Causes of Death

The Leading Causes of Death

United States and South Dakota, 1995 and 2001



Source: National Center for Health Statistics, 2003

The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

The Leading Causes of Death and Their Risk Factors

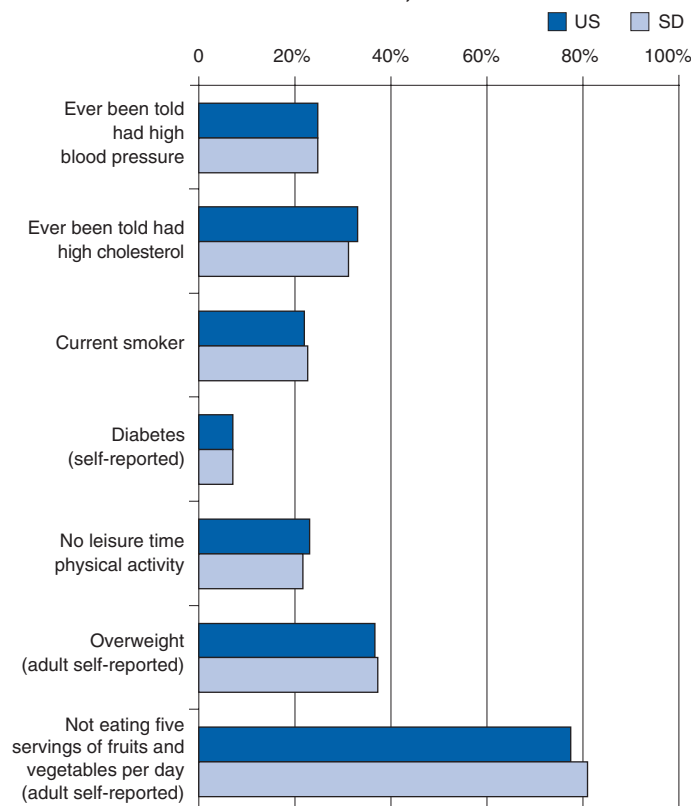
Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in South Dakota, accounting for 1,985 deaths or approximately 29% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 490 deaths or approximately 7% of the state's deaths in 2001.

Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 1,650 are expected in South Dakota. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 4,000 new cases that are likely to be diagnosed in South Dakota.

Estimated Cancer Deaths, 2004

Cause of death	US	SD
All Cancers	563,700	1,650
Breast (female)	40,110	100
Colorectal	56,730	190
Lung and Bronchus	160,440	420
Prostate	29,900	120

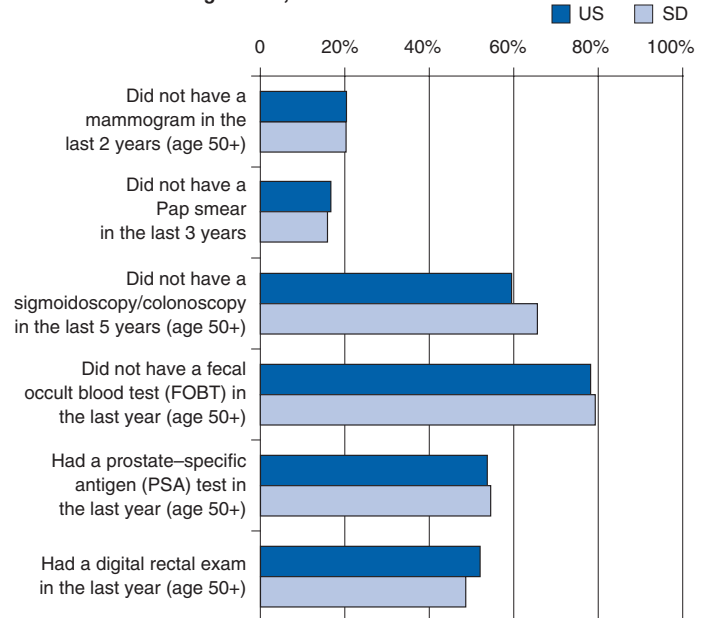
+ Represents fewer than 50 deaths.

Source: American Cancer Society, 2004

Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

South Dakota's Chronic Disease Program Accomplishments

Examples of South Dakota's Prevention Successes

- A diabetes death rate that is lower than the national average (24.2 per 100,000 versus 25.2 per 100,000).
- An 18.4% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 38.7% in 1992 to 20.3% in 2002).
- Prevalence rates lower than the corresponding national rates for self-reported high blood cholesterol (31.2% in South Dakota versus 33.1% nationally) and for women older than age 18 who reported not having had a Pap smear in the last 3 years (15.9% in South Dakota versus 16.7% nationally).

CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to South Dakota in the areas of cancer, heart disease, stroke, and related risk factors.

CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for South Dakota, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS) <i>South Dakota BRFSS</i>	\$92,721
National Program of Cancer Registries <i>South Dakota Cancer Registry</i>	\$280,430
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program	\$0
Diabetes Control Program <i>Diabetes Education Recognition Program</i> <i>The Link Program</i>	\$300,000
National Breast and Cervical Cancer Early Detection Program <i>Breast and Cervical Cancer Program</i>	\$819,322
National Comprehensive Cancer Control Program	\$0
WISEWOMAN <i>A New Leaf...Choices for Healthy Living</i> <i>Active Living Every Day</i>	\$681,373
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program <i>South Dakota Tobacco Prevention and Control Program</i>	\$793,593
State Nutrition and Physical Activity/Obesity Prevention Program	\$0
Racial and Ethnic Approaches to Community Health (REACH 2010)	\$0
Total	\$2,967,439

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in South Dakota that fall into other health areas. A listing of these programs can be found at <http://www.cdc.gov/nccdphp/states/index.htm>.

Opportunities for Success

Chronic Disease Highlight: Childhood Overweight

Childhood overweight is a risk factor for adult conditions such as obesity, cardiovascular disease, hypertension, diabetes, and other health problems. Research from a national study published in *Pediatrics* concluded that 60% of overweight 5- to 10-year olds already have at least one risk factor for heart disease.

In South Dakota, childhood overweight is a growing problem. Data from the *Height and Weight Report for South Dakota Students* for school year 2002-2003 showed an increase in the numbers of elementary and middle school children aged 12 and older who were at risk for overweight, and indicated slight decreases in the number of at-risk children aged 12 and younger. The data also showed that 16.2% of whites and 17.6% of American Indians/Alaska Natives (AI/ANs) were at risk for overweight (see table below). During the 2002-2003 school year, the numbers of children considered overweight increased in all age groups, with the exception of children aged 15 to 19. The data also provided evidence of racial disparities in the prevalence of childhood overweight: approximately 14.5% of whites and 23.6% of AI/ANs were overweight. Compared with data from the 2001-2002 school year, these figures represent a slight increase for whites (+0.2), but a noticeable increase for AI/ANs (+3.5%).

South Dakota has developed several approaches to address the problem of childhood overweight. For example, the state is tracking the prevalence of the problem through its *School Height and Weight Reports*, and is working to coordinate obesity prevention efforts among parents, teachers and coaches, and school administrators.

Text adapted from *School Height and Weight Report for South Dakota Students, 2002-2003 School Year* (2003).

Students at Risk for Overweight and Currently Overweight by Race, School Year 2002-2003

	Race				Total
	White	AI/ANs	Other Races	Race Unknown	
Number of Students	14,005	2,785	581	1,991	19,362
At Risk for Overweight	16.2%	17.6%	20.5%	17.2%	16.7%
Currently Overweight	14.5%	23.6%	17.9%	20.4%	16.6%
At Risk for Overweight and Currently Overweight Combined	30.7%	41.2%	38.4%	37.6%	33.3%

Source: South Dakota Department of Health

Disparities in Health

The five leading causes of death in 1998 for all South Dakota residents were heart disease, cancer, cerebrovascular diseases, accidents, and chronic obstructive pulmonary diseases. Heart disease accounted for 31% of South Dakota's deaths in 1998. Since 1980, women have accounted for over 40% of South Dakota's heart disease deaths; since 1992, this death rate has been nearing 50%. The American Heart Association (AHA) reports that after menopause women are at greater risk for heart disease than men. The AHA also reports the controllable risk factors that can reduce the risk of heart disease for both men and women include avoiding tobacco, maintaining a low-fat diet, and engaging in regular physical activity.

AI/ANs, who comprise more than 500 federally recognized tribes across the country, represent 1% of the U.S. population. Compared with other racial and ethnic minorities, AI/ANs have the highest poverty rate, 26%, which is 2 times the national rate. Like AI/ANs in the United States, South Dakota's AI/ANs are experiencing increasing health disparities.

In South Dakota, AI/ANs represent the state's largest minority population (7.3%). The leading causes of death for AI/ANs in South Dakota are heart disease, cancer, accidents, chronic liver disease, and diabetes. According to the Indian Health Service, approximately 25.4% of the adult population on South Dakota's Indian reservations has been diagnosed with diabetes. American Indians in South Dakota have heart disease death rates that are considerably higher than the rates for whites (819 per 100,000 versus 467 per 100,000). Stroke rates for South Dakota's AI/ANs are also higher than the rates for whites (165 per 100,000 versus 115 per 100,000).

To begin to address the issues of heart disease and diabetes, the South Dakota Department of Health has implemented both a Cardiovascular Health Program and a Diabetes Prevention and Control Program, working with populations throughout the state who are at risk for these diseases.

Other Disparities

- **Smoking:** Individuals who indicated that they were of "other race" were more likely to report being current smokers (37%) than whites (21.2%).
- **Nutrition:** Individuals who indicated that they were of "other race" were more likely to report not consuming 5 or more servings of fruits and vegetables per day (82.3%) than whites (80.9%).

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For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42
4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962
E-mail: ccdinfo@cdc.gov | Web: <http://www.cdc.gov/nccdphp>